APPENDIX A
Consideration of Comments for Leviathan-Loope Rangeland Project

Notice of this project was published in the Schedule of Proposed Actions (SOPA) on August 19, 2014. A Notice of Proposed Action (NOPA) was distributed on February 20, 2015 to approximately 36 agencies, individuals, and organizations. The NOPA summarized the Proposed Action, provided notification that an EA was being prepared and would be available for review, and requested comments on the proposed action. A legal notice advising of the availability of the NOPA was published in the Reno, Nevada Reno Gazette- Journal, the newspaper of record, on February 26, 2015.

The 30 day comment period on the proposed action ended on March 27, 2015. The Forest received comments from three organizations and individuals during the comment period and comments from one organization outside of the comment period (*) (Table1.).

Table 1: Parties that Responded

Name	Acronym	Project File Document Name
Fulstone (March 24, 2015)	FIM	FIM_Comments
Friends of Hope Valley (March 25, 2015)	FOHV	FOHV_Comments
Sierra Club (Toiyabe Chapter) (March 20, 2015)	SCTC	Sierra Club_Comments
Pacific Crest Trail Association	PCT	PCT_ Comments (Phone conversation followed by email)
*Lahontan Regional Water Quality Control Board (June 29, 2015)	LRWQCB	LRWQCB_Comments

The comments were analyzed, summarized, and considered in the preparation of this EA. Comments were reviewed by the interdisciplinary team (ID team) to determine if issues or concerns were raised that demonstrated a clear cause-effect relationship and if recommendations/remedies were suggested that would address the issue/concern. An issue is a point of disagreement, debate or dispute about some environmental impact. An issue has a cause and effect relationship within the proposed action or alternatives.

The Responsible Official determined that comment input received on the Proposed Action did not identify issues, but did express the following key concerns with the proposed action:

- Boundary adjustments within the wilderness are detrimental to the future grazing in the area
- The Proposed Monitoring procedure is not consistent with the more recent approaches used by other agencies such as NRCS
- Allotment closures are detrimental to the future of grazing in the area.
- Potential effects to sage grouse from the change in season of use and from the new proposed water development need to be addressed.
- How climate change was considered during project planning.

These Key concerns are acknowledged and addressed in the EA and in the Final Decision Notice.

After reviewing the comments, the ID Team determined there were six general themes under which the individual comments could be categorized: General Grazing Operations; Ecological Range Condition and Monitoring; Allotment Closures; Allotment Boundary Adjustment; Bi-state Sage Grouse and General Wildlife; and Water Quality and Meadow/Riparian Habitat.

GENERAL GRAZING OPERATIONS

1. **FIM-COMMENT: Rest Rotation**
    a. *How do the historical records indicate that a rest rotation strategy was beneficial to the range and resulted in improved range conditions?*

    RESPONSE: The best available information from historical range records for the Campbell Loope Allotment was used to determine what types of grazing strategies were implemented over time and what the subsequent monitoring outcomes were. The statement in the NOPA regarding range improvements following a rest rotation strategy was simply a reflection of what was in the records and was not meant to imply it was the only factor in range condition improvements. A table including historical monitoring data will be made available in the EA and or associated specialist reports.

    b. *Rest Rotation Strategy is not necessary because the sheep do not enter the allotment until mid-August well after the plants have matured.*

    RESPONSE: A rest rotation strategy is proposed as an *additional* grazing strategy for this allotment due to the results of monitoring which indicate some of the units were in declining ecological condition. Rest rotation would include resting a particular unit within the allotment or even just a portion of a unit for a period of time while the other units continue to be grazed. Under the Proposed Action, grazing strategies will include deferred rotation and rest rotation to provide more flexibility for grazing options especially during ongoing drought cycles.

2. **FIM-COMMENT**: *A planned grazing system with deferred rotation grazing that will work in this terrain would be to start grazing on one end of the allotment one year and the next year start on the other end of the allotment. This would give the range deferred grazing as discussed in the NOPA. We would prefer the deferred grazing system until there come time we can get all springs in good working condition.*

    RESPONSE: Under the proposed action, several grazing strategies are proposed to allow for flexibility in grazing management depending on the conditions and the needs to meet the desired ecological condition. See Response #1.

3. **COMMENT:** *We would like to keep the same dates of use and only change the grazing rotation as discussed in #1, above.*

    RESPONSE: The permitted season of use was adjusted to allow for greater flexibility in grazing management. On and off dates can be negotiated during the AOI meeting and development of the annual grazing plan. If there is a need to enter earlier or come off later within the adjusted permitted season that could occur depending on conditions and monitoring results.

4. **FIM-COMMENT:** *Please add an additional project to the effect that we need to pull the pipe at the well and install a pump, tank, and troughs at a cost of at least $5,000.*

   RESPONSE: The Proposed Action currently includes this water development as well as several others in the project area.

5. **FIM-COMMENT**: *Table 1 (page 6) specifies deferred-rotation grazing in Campbell-Loope Allotment. Deferred grazing or deferred-rotation grazing are realistic management alternatives. However the text on page 5 calls for rest rotation. Please refer to the rest rotation discussion above and withdraw the requirement for rest rotation grazing when sheep are herded in this allotment.*

   RESPONSE: Please see Response #1

6. **FIM-COMMENT:** *The authors state that there appear to be impacts by livestock but fail to identify which class of livestock (sheep or cattle) and fail to provide direct and objective observations of how livestock cause such problems as noxious weeds. Please specifically describe how "impacts" caused by livestock grazing was distinguished from the identical "impacts" with other causes.*

   RESPONSE: A complete analysis of potential and existing impacts from livestock grazing will be presented in the Range Specialist Report and summarized in the EA. Impacts caused by other past, present or reasonably foreseeable activities will be described in the EA.

7. **FIM COMMENT**: *Your allotment map seems to be inaccurate in the eastern portion of the Campbell-Loope Allotment. Please correct the allotment maps to indicate our customary use of Monitor Creek for water.*

   RESPONSE: The allotments maps will be reviewed for accuracy and consistency with Forest records prior to publication of the EA and Draft Decision Notice.

8. **FOHV COMMENT:** *No information is given in The Notice identifying which unit was the one that was being grazed. Nor is the size of each unit given so as to formulate the occupancy per acre of the units in both allotments now being grazed and what the occupancy will be in the future.*

   RESPONSE: A more detailed discussion on each allotment, including occupancy rates, utilization standards, and proper use criteria are provided in the Range and Vegetation Specialist's Reports and summarized in the EA.

9. **FOHV-COMMENT:** *Our first concern with the Campbell-Loope (C-L) allotment is the exact location of the three units. Detailed maps of the units within the allotments would have clarified The Notice greatly. We surmise that the Poor Boy unit is west of the East Fork of the Carson River and that the Lexington and Mogul units are east.*

   RESPONSE: More detailed maps of the project area are provided in the EA as well as in pertinent specialist's report (Range and Vegetation Specialist Reports).

10. **FOHV-COMMENT:** *The grazing management strategy for the C-L allotment is totally based on the development of three springs on the unused units.*

    RESPONSE: The Forest Service will work with the permittee to establish a reasonable timeline to develop water improvements before implementing the rest rotation strategy.

11. **FOHV COMMENT:** *Reduction in the occupation rate until the water improvements are installed is not mandated according to The Notice. Instead the occupation rate of 13.72 head/acre, compared to 11.08 head/acre for the Leviathan allotment, will remain the same. Until the water improvements are installed on the other two units of the C-L allotment one can expect a 300% occupancy increase on the one unit that has usable water or approximately 30 head/acre. Thus the occupation rate which has produced ecological condition of "Functioning-at-Risk" with a down-ward ecological trend, may remain the same as before. A time table of the actions to be taken is necessary to clarify this concern.*

    RESPONSE: As discussed in previous responses, some of the units considered to be functioning at risk are due to several factors beyond livestock grazing, including prolonged drought conditions, soil and vegetation type. A rest rotation strategy will not be enforced until water improvements throughout the allotment have been completed. Stocking rates and season of use for both allotments will be re-evaluated annually and adjusted when necessary to meet the desired ecological conditions.

12. **FOHV COMMENT**: *Four out of five of the guidelines proposed under Grazing Strategies calls for rest and rotation which would necessitate the opening of the two unused units in the Campbell-Loope Allotment which are themselves also dependent upon the afore mentioned water developments. These four strategies are being used on the Leviathan allotment which most likely accounts for its ecological up-ward trend, while the C-L has a down-ward trend.*

    RESPONSE: Under the proposed action, rest rotation will be incorporated into the Campbell-Loope Allotment grazing strategy. Rest rotation would include resting a particular unit within the allotment or even just a portion of a unit for a period of time while the other units continue to be grazed. Under the Proposed Action, grazing strategies will include deferred rotation and rest rotation to provide more flexibility for grazing options especially during ongoing drought cycles.

13. **FOHV COMMENT:** *The fifth strategy calls for "Adequate time for growth prior to grazing. How this strategy is planned to be met is not covered. Is grazing to be postponed for a number of years, at least until the present drought breaks? It seems that at the elevations involved June 1st would be too early in the year "to allow for growth" of the native plants before grazing starts.*

    RESPONSE: The proposed permitted season of use allows for greater flexibility in grazing management to help achieve desired future condition, particularly during times of drought and or changing growing seasons. Both long term and short term monitoring results will be used to determine grazing strategies within the bounds of this NEPA Decision. A readiness review is conducted every year to assure vegetation and soils are in proper condition prior to the turnout of livestock. A more detailed discussion of the proposed grazing strategy will be available in the EA.

14. **FIM COMMENT:** A number of authors discuss how there are limitations of the use of utilization for management decisions which include a preliminary identification of problem areas and more importantly a technique for mapping patterns of distribution. Please carefully determine utilization, proper use criteria, functionality, and other management analysis in accordance with these standardized technical definitions provided in published documents.

RESPONSE: The Forest Service adheres to Standards and Guidelines in the Toiyabe Forest Land and Resource Management Plan as amended to determine proper use criteria for range allotments.

15. **SCTC COMMENT:** *How does the Forest plan to enforce its proposed grazing requirements in light of declining budgets and staff?*

    RESPONSE: While a valid question this is outside the scope of the proposed analysis. Our future ability to manage the National Forest System lands, as tentative as it may be does not drive the decision making processes today. At this time, the district has the staff and funding to manage the rangeland management program. That current ability to manage the program is the baseline for our decisions.

16. **SCTC COMMENT:** *We strongly urge the USFS to include a stronger restoration element to its management objectives and to its management activities in order to correct the past (and continuing) range conditions and trends which have led to destruction and degradation of DPS Sage Grouse habitat in these two allotments. Can sheep grazing actually be used for habitat restoration? Or do these allotments need to be rested until restoration objectives are met?*

    RESPONSE: Under the proposed action, grazing following the proper use criteria established under the Toiyabe Forest Plan as amended by the Sierra Nevada Forest Plan and the Bi-State Sage Grouse Plan Amendment, will lead to improved vegetation conditions throughout both allotments. Part of the proposed action includes changing the season of use dates to allow more flexibility to use sheep as a management tool to control invasive species such as cheatgrass. By allowing sheep earlier on the range in some years, cheatgrass can be grazed before it goes to seed. Likewise, later grazing in the fall can also help trample and damage cheatgrass seeds on the ground and prevent germination from occurring the following spring.

ECOLOGICAL RANGE CONDITION AND MONITORING

17. **FIM COMMENT**: *Why does the Forest Service not use terminology similar to NRCS when describing trend and ecological condition?*

    RESPONSE: All short term and long-term range monitoring conducted on the Carson Ranger District follows methodology and requirements outlined in FSH2209.2. A detailed explanation of monitoring including clear definitions of monitoring terms and how they can be used interchangeably will be provided in the Vegetation Specialist Report and summarized in the EA.

18. **FIM COMMENT:** *Clearly define rangeland monitoring and how it is conducted. Monitoring needs to follow FSH 2209.2*

    RESPONSE: All short term and long term range monitoring conducted on the Carson Ranger District follows methodology and requirements outlined in FSH2209.2. All short term and long term monitoring information, including timing, techniques and, outcomes will be disclosed in the EA.

19. **FIM-COMMENT**: *NOPA clearly indicates that the cause of declining range conditions is not a result of sheep grazing. A conclusion that a lack of rest rotation grazing causes range conditions to decline is best described as an assumption that is not supported with facts. What has been identified as declines in range condition due to the presence of sheep is mostly in error. The*

perceived declines and the presence of sheep are coincidental. A more careful analysis of both the range condition identified as a problem and the potential solutions needs to be completed.

RESPONSE: The Forest Service acknowledges in the NOPA and in the EA that many factors are contributing to declining ecological conditions within the allotment including drought, soil type and past and current livestock grazing management practices. This information, along will all monitoring data will be discussed and analyzed in the EA and associated specialists reports.

20. **FIM COMMENT**: *There is a reference to "long term monitoring data" that does not say what data has been collected, what has been observed, nor does it list the actual locations of monitoring data. Please provide that information in a form that will allow us to go to the same locations and conduct additional monitoring.*

    RESPONSE: More detailed information on monitoring will be included in the EA and the Range Specialist Report as part of the project record.

21. **FIM COMMENT:** *This first sentence says that data indicates the allotment is functioning-at-risk with a stable or downward trend but fails to say that the statement is only true for small portions, fails to specify how much area is involved, and fails to state the observed cause of the "risk". NOPA statements seem to indicate that localized indicators of functionality such as small areas of noxious weeds were identified and that small area incorrectly became the generalization that the entire allotment was deteriorating. The example of noxious weeds is a problem that can be solved through targeted weed control without impacting management* of the entire allotment. *Please provide this information in enough detail so readers can know why NOPA came to the stated conclusions.*

    RESPONSE: Long term monitoring plots are established to provide indicators of overall range condition on an allotment. It is not feasible to conduct monitoring over an entire allotment and therefore inferences are made based on monitoring results. While the data does not suggest that the entire allotment is in poor condition, presence of noxious weeds in a particular location can be an indicator of a larger problem with range condition. This can be true whether the poor condition is due to livestock grazing or not. For example, a severe wildfire in an allotment can result in decreased soil quality and increased weed infestations. While these conditions are not a result of livestock grazing, grazing management may have to be modified to adjust to the changed conditions of the landscape. The EA and associated specialist reports will include detailed analysis of all monitoring data.

22. **FIM-COMMENT:** *Page 5, fourth paragraph second sentence: "Several of the monitoring sites contain noxious weeds, have bare soil, and/or lack species diversity or appropriate vegetation type for a particular plant community." This statement refers to "several" of the monitoring sites which indicates that there is some number of sites that do not have any of the undesirable characteristics of noxious weeds, etc. Generalizing a condition that is limited to a small area in terms of stating that the entire allotment is not in functional condition ignores the clear instructions for monitoring as referenced above. Please specifically identify the area of land that has the undesirable features and the area of land that does not have these characteristics.*

    RESPONSE: See Response # 23 regarding monitoring inferences to overall ecological condition. A more detailed discussion of range monitoring including monitoring results will be included in the EA.

23. **FIM-COMMENT:** *The authors state that the same symptoms of "downward ecological trend" occur on areas that are not grazed and areas that are grazed which means that grazing is not the cause of the noxious weeds, bare soils, etc. Changes in both grazed and ungrazed areas are attributed in part to the ongoing drought conditions. Please clearly state that sheep grazing is not causing what are presented as both localized and allotment wide problems based on the data collected to date.*

    RESPONSE: Please see Response #23

24. **FIM-COMMENT**: *Pages 6 through 12 include a very helpful section of Management Direction that is somewhat incomplete. For example a statement on Page 9 indicates that: "Several different but similar terms (late seral, mid-succession, functioning) are used to describe desired (or satisfactory) range conditions in the management direction discussed above." The authors then make a statement that requires much more discussion when they conclude that these are all "...slightly different terms for the desired condition..." and they can all lead to conclusions about functionality.*

    RESPONSE: Clear definitions of monitoring terms and how they can be used interchangeably will be provided in the Vegetation Specialist Report and summarized in the EA. All pertinent Forest Service Management Direction related to livestock grazing will be included in the project record.

25. **FOHV-COMMENT:** *It is surprising that all three units have the same Ecological Condition of FR even though only one is being graze. This according to Table 6. However it is difficult to comprehend whether Table 6 presents present conditions or future conditions after "proper use".*

    RESPONSE: Table 6 in the NOPA is based on existing ecological condition of each unit and represents a strategy to move the range to the desired future condition. The ecological condition of the allotment is based on many factors including livestock grazing. The EA will include a more detailed discussion on how other contributing factors such as drought and overall drying trends can also contribute to poor ecological condition.

26. **SCTC COMMENT:** *There is little information on why these allotments are in unsatisfactory condition and how proposed management prescriptions in the NOPA would be more effective than the current management and would actually reverse declining ecological trends. When and why did the "past heavy grazing" occur and when did it stop? What utilization limits and other management prescriptions were prescribed and how were they enforced?*

    RESPONSE: This information is included in the project record, detailed in the Vegetation and Range Specialist Reports, and summarized in the EA.

27. **SCTC COMMENT:** *The cause of the current unacceptable ecological conditions of "functioning-at-risk with a stable or downward trend," according to the NOPA, is due to "an increasing drying trend resulting from several years of drought." Since our drought shows no signs of disappearing and may be the new "normal" for the national forests in the West, how will proposed grazing not continue to increase degradation and loss of healthy rangelands in this allotment as drought stresses continue?*

    RESPONSE: The proposed changes to the management direction of these allotments were identified to address the current condition and move the allotments condition toward "functioning" condition. Under the Proposed Action, an annual adaptive management approach will be employed to respond not only to potential impacts of livestock grazing but also the

changing environmental conditions that can affect the ecological condition of vegetation in the allotments. Short term and long-term monitoring information will be used to inform managers on existing range conditions as well as overall ecological trends and what changes in range management need to be made to align with those trends. In addition, relying on resources such as the National Weather Service drought models (https://www.cpc.ncep.noaa.gov/products/Drought/)will also allow range managers to prepare permittees for modifications to the upcoming grazing season that will be necessary to adapt to environmental conditions. These modifications can include changed on and off dates for livestock, reduced grazing season/livestock numbers, or complete rest of individual units or the entire allotment.

28. SCTC COMMENT: *We are concerned about the current condition of this allotment, which the NOPA characterizes as ecologically "functioning-at-risk with an upward or stable trend." Does the USFS consider this condition acceptable, since a "stable trend" means that the functioning-at-risk condition is continuing and is not improving?*

RESPONSE: The proposed changes to the management direction of these allotments were identified to address the current condition and move the allotments condition toward "functioning". The EA will disclose the drivers of "current condition" state.

29. **SCTC COMMENT:** *The EA should explain how proposed grazing management will not continue unsatisfactory ecological conditions and declining trends. If the Forest decides to continue grazing, please explain how proposed changes in management will correct the undesirable range conditions and declining trends of the Leviathan and Campbell-Loope Allotments.*

    RESPONSE: The EA includes a discussion on the proposed changes to the management direction that were identified to address the current condition and move the allotments condition toward "functioning". The potential effects of the proposed action and alternatives on the rangeland

30. **SCTC COMMENT:** *We are not at all confident that the lands in these two allotments are either capable of or suitable for sheep grazing, given the continuing unsatisfactory ecological conditions. The EA should present adequate evidence on these evaluations in which the USFS made these determinations, including how droughts and climate change are factored into these evaluations.*

    RESPONSE: The current capability and suitability analysis for each allotment is summarized in the EA and available for review in the project record. If future short term and/or long term monitoring indicates ecological trends are declining and on a downward trend due to changing climatic conditions (or grazing impacts), grazing strategies will be modified to address the changing trends.

31. **SCTC COMMENT:** *Are parts of the allotments in satisfactory condition? The EA should include maps of the allotments showing which parts are in satisfactory and unsatisfactory conditions.*

    RESPONSE: Yes, these will be depicted on maps in the EA and data supporting that assessment will be available in the Project record and summarized in the EA.

32. **LRWQCB COMMENT**: *How will utilization standards and disturbance thresholds be monitored?*

    RESPONSE: All short term and long term range monitoring conducted on the Carson Ranger District follows methodology and requirements outlined in FSH2209.2. All short term and long

term monitoring information, including timing, techniques and, outcomes will be disclosed in the EA and in the Range and Vegetation specialists report included in the project record.

33. **LRWQCB COMMENT**: *What will be done to assure that "functioning-at-risk" allotments are restored to functioning, including long-term and interim monitoring goals?*

    RESPONSE: The EA includes a discussion on the proposed changes to the management direction that were identified to address the current condition and move the allotments condition toward "functioning". As mentioned above, long term and short-term monitoring on these allotments will allow for ongoing assessments of range condition and subsequent modifications to grazing strategies as needed. The potential effects of the proposed action and alternatives on the rangeland and other resources within the project area are also analyzed in the EA and specialist reports.

34. **LRWQCB COMMENT**: How will livestock be excluded from sensitive areas such as aspen groves, including the location of resting areas relative to sensitive areas.

    RESPONSE: Under the proposed action, grazing following the proper use criteria established under the Toiyabe Forest Plan as amended by the Sierra Nevada Forest Plan and the Bi-State Sage Grouse Plan Amendment, will lead to improved vegetation conditions including aspen stands throughout both allotments. A detailed analysis of effects to aspen stands can be found in the Leviathan-Loope Vegetation Specialist Report in the project record.

ALLOTMENT CLOSURES

35. **FIM COMMENT**: *Please consider, in general, not closing allotments but putting them into some status of non-use for an indefinite period. Closing allotments eliminates future opportunities to use planned grazing as a management tool.*

    RESPONSE: The Forest Service recognizes the importance of retaining existing allotments even when vacant. However, the allotments proposed for closure are isolated land areas surrounded by either private or other agency lands and are not part of an active or feasible grazing system. Since they have been in Forest Service ownership, only the Barber Allotment was actually ever grazed and that was many decades ago. A Decision Notice signed in 1980 determined the allotment would be closed for wildlife management values once the permittee was no longer interested in owning the permit. The grazing permit was waived back to the Forest Service in 1996. It is unclear why the allotment was not closed at this time. The Forest Service felt it was prudent to include the closure again in this Decision due to the age of the NEPA (1980). The Mud Lake Allotment also contains valuable habitat for wildlife that exceed the potential grazing benefits. A large 30 acre wetland in this small allotment attracts numerous migratory birds, mule deer and other wildlife. The Forest Service is currently actively engaged in restoring the wetland habitat which is being threatened by noxious weed infestations.

36. **FOHV COMMENT:** *We, the members of Friends of Hope Valley, appreciate the effort which the Carson District has put forth in fulfilling the multiple use mission of the Forest Service while protecting the natural environment. Traditionally there has been a chasm between environmental groups and the ranchers who utilize public lands for sheep, "hoofed locust" grazing. We see the research and field work behind and the proposals in The Notice of Proposed*

Action: Leviathan-Loope Rangeland Project to be an excellent attempt to bridge this gap. The closing of the Mud Lake, Barber, Double Springs, and especially that section of the Campbell-Loope allotment in the Mokelumne Wilderness to grazing demonstrates the establishment of the foundation of that bridge.

RESPONSE: General Comment

37. **LRWQCB-Comment:** *We agree with the closure of the Barber allotment and the Double Springs allotment from grazing. We also agree with the continuance of sheep rather than cattle livestock.*

    RESPONSE: General Comment

ALLOTMENT BOUNDARY ADJUSTMENT

38. **FIM COMMENT**: *Page 13 contains a list of management actions "bullets" that includes the plan to close the Wilderness Area portion of the Campbell-Loope Allotment to grazing and physically remove the portion designated as Mokelumne Wilderness from the allotment (see page 21 Figure 2)."*Modify the Campbell-Loope Allotment boundary to avoid areas that are inaccessible to livestock and have minimal forage capability." *This proposed action seems to be based on a perceived localized conflict between sheep grazing and recreational use; probably along the constructed trail that traverses the wilderness area. However the Wilderness Act requires that grazing activities continue within wilderness areas as a desirable activity and for those same reasons our sheep grazing allotment should remain available to properly managed sheep grazing throughout the portion that is now designated as Wilderness. Please do not change the allotment boundaries and reduce the allotment area by some 2,800 acres but give us an opportunity to solve such problems.*

    RESPONSE: The Forest Service recognizes that grazing is an acceptable use in wilderness areas. As an example, the Carson Ranger District recently completed an Environmental Assessment that re-stablished sheep grazing in the Carson Iceberg Wilderness (East Alpine Rangeland Project 2012).

    The proposed changes to allotment boundary were made based on several factors:

    - Lack of capable forage within that portion of the allotment
    - Steep rugged terrain that is difficult to access from the rest of the allotment-
    - The lack of grazing use in this area

    The Forest Service discussed the proposed changes on at least two occasions with the permittee and received verbal agreement that the changes were logical and made sense as part of the overall grazing plan for the allotment. Currently there are no known user conflicts between sheep grazing and recreation use on this allotment.

BI-STATE SAGE GROUSE/GENERAL WILDLIFE CONCERNS

39. **FOHV-COMMENT:** *No mention is made of how this improvement (water) would affect the wildlife, both fauna and flora, of the area. Will the construction and maintenance be such that all of the animals now using these water sources will be able to continue to do so*.

RESPONSE: Water will still be available to wildlife at the existing watering areas as well as at new improvement sites. Under the proposed action, wildlife escape ramps will be placed in water improvements to reduce the potential for inadvertent drowning of wildlife. A more detailed discussion on the potential effects to wildlife from the Proposed Action will be available in the EA and Wildlife Specialist reports.

40. **SCTC COMMENT:** *The NOPA does not even mention (or include in the Literature cited section) this process or the draft (February 2015) Record of Decision or any conservation measures in the amendment as part of this grazing proposal. In addition, the NOPA only mentions Sage Grouse once on page 23. There appears to be a total disconnect between the Carson Ranger District's grazing proposal and the Forest Plan Amendment process, calling into question Humboldt-Toiyabe National Forest commitments to conservation of the DPS Sage Grouse.*
RESPONSE: A thorough review and analysis of potential effects to the bi-state sage grouse is provided in the Biological Evaluation (Project record) and summarized in the EA. The proposed action incorporates all pertinent standards and guidelines from the 2016 Greater Sage Grouse, DPS Bi State Sage Grouse Forest Plan Amendment.

41. **SCTC COMMENT:** *The EA should address grazing impacts on Sage Grouse habitat and other Forest resources with several scenarios of drought return to "normal" conditions, continuing short-term drought, and future long-term drought.*

    RESPONSE: In light of changing climatic patterns such as drought, the forest service will apply an adaptive grazing management strategy that will help protect sage grouse habitat and continue to provide forage for livestock. The EA will summarize the different grazing strategies and disclose the potential effects on sage-grouse and the habitat that occurs in the project area. The Range Specialist Report and the Wildlife BE and Specialist Report include more detailed analysis on the potential effects to bi-state sage grouse.

42. **SCTC COMMENT:** *We are particularly concerned about -the proposed change to an earlier season-of-use since this would put sheep into direct conflict with the use of the allotment by DPS Sage Grouse in the summer, brooding season. One of the purposes of the NOPA is to solicit comments regarding issues that should be addressed in the EA.*

    RESPONSE: According to USGS and state wildlife agencies, sage grouse primarily occur in the project area (Leviathan Allotment) during the late summer months and early fall when individual males are dispersing throughout their home range. There is no known lekking, nesting or brood rearing habitat in the project area. The potential effects of sheep grazing to sage grouse, including the expansion of the season of use dates, are disclosed in the Wildlife Biological Evaluation.**SCTC COMMENT**: *We are also extremely concerned about proposed "water development" impacts on critical summer habitat components meadows supported by springs or sub-irrigated which are critical for Sage Grouse brood-rearing.*

    RESPONSE: As mentioned above, the project area does not include any lekking, nesting or brood rearing habitat for bi-state sage grouse. Under the Proposed Action, new water developments including watering troughs and troughs with holding tanks are designed to minimize impacts to meadow systems. New troughs and tanks will be located in upland areas outside of seeps, springs, and meadow areas and will be placed on a certified weed-free gravel apron for erosion control. Spring boxes will be placed in the head of the spring or within the stream channel and will be designed by Natural Resource Conservation Service (NRCS) or Forest Service engineers. Water is carried to the troughs and tanks through PVC pipes via a gravity fed

pumping system placed at the spring. The spring developments will be fitted with control valves that will shut off water to a trough when tanks not in use (See response to Comment 44). Any overflow that occurs goes back into the spring via an outlet pipe and the troughs and storage tanks are emptied when not in use. Because the grazing season typically only lasts one to two months for both allotments and sheep typically only occur in a single unit for approximately two weeks at a time, the demands on sub-surface water sources will be minimal. Furthermore, by increasing the number of available and functioning water developments, the pressure on any one spring will be reduced as livestock will be more broadly and more frequently distributed throughout the allotments. The majority of existing water sources are located in largely xeric upland plant communities with the exception of the Indian Springs holding pond on Leviathan Allotment which is located near a wet meadow and Poor Boy and Herder Springs troughs on Campbell-Loope Allotment which are located on dry meadows. According to long term monitoring results, moist and dry meadow areas are considered to be in Functioning-at-risk condition throughout the project area. The increased disbursement of water developments throughout the allotments, in addition to proper use criteria and other design features, will allow range conditions to improve as sheep will spend less time grazing in any one unit and will be able to graze more broadly throughout the remainder of the allotments.

WATER QUALITY AND MEADOW/RIPARIAN HABITAT

43. **FOHV-COMMENT:** *Also, will the overflow from the system be enough so as to maintain the riparian community below the- springs?*

    RESPONSE: Reconstruction and new improvements will be designed in conjunction with Natural Resource Conservation Service (NRCS) Engineers to limit the effects to the spring or water source. Water collection at each spring site will be designed so as to not take all the water flow into the pipes. All of the troughs will be outfitted with a pipe that allows overflow water to go back into the creek. The spring developments will also be fitted with control valves that can shut off water to a trough when the troughs are not needed. The water that flows beyond the points of catchment/diversion will continue to flow in the creeks. Sheep watering troughs will be fitted with wildlife escape ramps. A more detailed discussion of the potential effects of spring development on riparian communities will be available in the EA and the Range Specialists Report.

44. **FOHV-COMMENT:** Water pumps are to be installed but the energy source for the pumps is not given, windmills perhaps? The location and number of developments per unit is not addressed.

    RESPONSE: Every attempt will be made to design all newly developed water systems as well as ones proposed for improvement with a gravity fed system and therefore water pumps would not be necessary. In the event a gravity fed system is not feasible, a solar or generator-powered pump would be installed to pump water from springs to the troughs. The pumps only need to operate long enough to fill up the tank or trough and therefore will only be operating for short periods during the day (one to three hours spread throughout the day). The troughs will be located in upland vegetation with a certified weed-free gravel apron underneath the troughs for erosion control. A more detailed discussion on the locations and types of water improvements including power sources will be available in the EA and in the Leviathan-Loope Range Specialist Report.

45. **LRWQCB**-Comment*: In the development of updated Allotment Management Plans (AMPs) for each allotment, please incorporate the above adaptive management approaches and guidelines. Below are specific comments from the Lahontan Water Board related to water quality and riparian habitat within the project boundaries:*

- *Specific provisions for monitoring of allotments to be spelled out and forage utilization standards to be strictly enforced, especially functioning-at-risk areas.*

  Response: Monitoring methods and the proposed proper use criteria for grazing are described in the EA and in the Leviathan-Loope Range and Vegetation Specialist Report.

- *Provide specific provisions for protection of aspen groves to ensure that livestock cannot graze suckering aspen groves and that bedding locations are outside of aspen regeneration areas.*

  RESPONSE: Under the proposed action, grazing following the proper use criteria established under the Toiyabe Forest Plan as amended by the Sierra Nevada Forest Plan and the Bi-State Sage Grouse Plan Amendment, will lead to improved vegetation conditions including aspen stands throughout both allotments. A detailed analysis of effects to aspen stands can be found in the Leviathan-Loope Vegetation Specialist Report in the project record.

- *Response to drought/ loss of water source - if water not available in any given area in an allotment, detail what actions will be taken (reduction of herd size, etc.) to assure that ecosystem functioning is not impaired.*

  RESPONSE: Modifications to grazing strategies can be made annually depending on site conditions. The Forest Service has established policy for resting allotments and/or modifying herd numbers during drought years to protect resources (FSH 2231.7, FSH 2209.13).

- *Spring sources should be protected from livestock access and trampling using appropriate BMPs like exclusion fencing.*

  RESPONSE: Existing and future planned water developments are designed to carry water away from the spring source and to the troughs and holding tanks which are located in upland vegetation. Exclusion fence is not required for sheep allotments as access to water is controlled by a herder which controls the timing and intensity at water developments. Sheep will be herded away from a spring areas.

  Water stations, such as troughs, should be separated from springs and riparian areas.

  RESPONSE: Existing and future planned spring developments are designed to carry water away from the spring source to the troughs, which are located in upland vegetation. A more detailed discussion of water improvements within the project area can be found in the Leviathan Loope Range Specialist Report.

- *In the Loope Canyon portion of the Campbell-Loope allotment, unstable soils and mine spoils associated with the many abandoned mines or the few marginally active mines pose a potential threat to local surface water quality. Erosion and subsequent sedimentation of acid spoils in local surface waters may be accelerated by livestock hoof action during grazing. We suggest that the Carson Ranger District evaluate potential water quality impacts of grazing in this area and consider closure of acreages of the Campbell-Loope allotment with high former and current mining activity in the vicinity of Zaca Mine, Colorado Hill, Morningstar Mine, and Loope Canyon.*

RESPONSE: A detailed discussion of the potential effects to soils and water quality are included in the Leviathan Loope Watershed Specialist report and summarized in the EA.

- *In the Forest Plan Amendment section 4, we find the 20 percent stream bank and shoreline limit for disturbance to be excessive, particularly for the high quality Sierra Nevada waters and ecosystems in Alpine County, and particularly for sheep, which tend to do much less damage to stream banks and shorelines than cattle. We suggest that analysis be conducted to determine and justify any bank trampling standard.*

  RESPONSE: Standards for streambank disturbance are determined by the Forest Plan as amended by the Sierra Nevada Forest Plan.

  Analysis of contingency plans for allotment use (or rest) to allow resource concerns to be adaptively managed in the event that permitted allotments do not have adequate forage due to wildfire.

  RESPONSE: Temporary modifications to term status range permits, including taking non-use, can be made annually depending on site conditions (FSH 2231.7, FSH 2209.13). The Carson Ranger District adheres to direction in the Toiyabe Forest Land Management plan and the Bi-State Sage Grouse Forest Plan Amendment following wildfire which includes resting an allotment for 2 to 3 years post-fire and to assess conditions prior to returning livestock to the allotment.

MISCELLANEOUS COMMENTS

46. **FIM-COMMENT:** *We can properly manage and do justice to ourselves and the Range if we are given time and money to do the work.*

    RESPONSE: General Comment

47. **FIM-COMMENT:** *We have had a drought for four years and it has been a job to keep our operation going. We need moisture. The Forest Service took four allotments from us and the BLM took one allotment. We have managed to hold things together and still protect our ranges. In order to keep our ranch going we purchased other ranges for $300,000 and are still paying that debt off. So please give us a little* more time and we will have a good plan for Campbell-Loope. We want to work with you.

    RESPONSE: General Comment

48. **FIM COMMENT:** *It seems unusual to complete a single NOPA for management of more than one allotment. Please explain if preparation of an Environmental Assessment will follow that also includes multiple allotments in a single EA or if a NEPA document is required for each allotment.*

    RESPONSE: In accordance with CEQ regulations, a proposed action can incorporate numerous actions to be analyzed within a single NEPA document. This methodology has been widely used in completing range rescission NEPA documents across the region. For this project the Environmental Assessment will analyze the potential effects of the proposed action and alternatives on both the Leviathan and Campbell–Loope Allotments. The subsequent Draft DN/FONSI will document the decision for both Allotments.

49. **FOHV-COMMENT:** *The Friends of Hope Valley realize that grazing can be a benefit to range land. The Leviathan-Loope Rangeland Project as put forth in the Notice of Proposed Action appears to be well thought out in terms of improving the ecological stasis of those areas.*

    RESPONSE: General comment

50. **FOHV-COMMENT:** *The explanation of the ecological classification of rangeland and trends is excellent as is the definition of the terms used in the report, with some exceptions. This is mainly true of the Leviathan allotment but unfortunately the report leaves many questions pertaining to the Campbell-Loope units.*

    RESPONSE: General Comment

51. **FOHV COMMENT**: *There is also the question of whether public monies should be used for the monetary gain of private individuals. Would the grazing fees be raised to cover the cost?*

    RESPONSE: The grazing fees will not be increased as part of the proposed action

52. **FOHV COMMENT**: *The report states under 'Monitoring' that the Forest Service "would invite participation from' "other interested parties where interest is expressed." Would this possibly include members with the required expertise from Friends of Hope Valley as well as from the Alpine Watershed Group? Would experts from the Forest Service be able to take the time to train interested members of these groups?*

    RESPONSE: The Forest Service would be happy to work with your organizations to demonstrate the monitoring techniques we routinely conduct for range management

53. **FOHV COMMENT:** *In addition would the Forest Service be able to make the effort to invite and mentor member of local FFA chapters as part of the members Rangeland Judging education?*

    RESPONSE: The Forest Service would be happy to discuss this with you.

54. **FOHV COMMENT:** *Sheep grazing can have positive ecological benefits as demonstrated by the use of sheep to control cheat grass on C Hill in Carson City. We do however have some concerns, mainly the time line between implementing the water improvements on the two un-named C-L units and the commencement of grazing on those units. The water improvements themselves raise other concerns. When these problems are rectified so that the proposed 'grazing management strategies' can be correctly implemented, and the rangeland health and ecological conditions have an up-ward trend toward 'Functioning", Friends of Hope Valley will be able to completely support the plan. We also hope that through sharing in the monitoring we, as well as other groups such as the FFA, will be able to take a positive part in the ecological improvement of both allotments.*
    RESPONSE: General Comment

55. **SCTC COMMENT:** *Please translate "an understory of undesirable/drought tolerant species" into actual plant species and specific management prescriptions to deal with them in the EA.*

    RESPONSE: The plant species and conditions will be described in the EA and in the Vegetation Specialist's Report in the project record.